# **Rabindra Bharati University** Department of Library & Information Science M.Lib.I.Sc. (Semester) Syllabus

(Recommended by the <u>Board of Studies</u> held on 22.4.2013) Approved by EC on 25.6.2013 and confirmed on 12.7.2013

# Structure

Paper	Subject	Final Exam Marks	Exam Hours	Internal Assessment	Full Marks	CREDIT	NO.OF CLASS
MLI- 101	Information & Communication	40	2 Hrs	10	50	5	80
MLI- 102	Information Analysis, Consolidation and Repackaging	40	2 Hrs	10	50	5	80
MLI- 103	Information Processing (Theory)	40	2 Hrs	10	50	5	80
MLI- 104	Resource Description (Theory)	40	2 Hrs	10	50	5	80
MLI- 105	Information & Communication Technology (Theory)	40	2 Hrs	10	50	5	80
MLI- 106	Management of Information System & Organizations	40	2Hrs	10	50	5	80
MLI- 107	Research Methodology	40	2Hrs	10	50	5	80
MLI- 108	Information & Communication Technology (Practical)	40	3Hrs	10	50	5	112
	Total	320		80	400	40	672
			2 <sup>nd</sup> Sem	nester			
MLI- 201	Information Economics & Knowledge Management	40	2Hrs	10	50	5	80
MLI- 202	Content Design & Technical Writing	40	2Hrs	10	50	5	80
MLI- 203	Information Processing (Practical)	40	3Hrs	10	50	5	112
MLI- 204	Resource Description (Practical)	40	3 Hrs	10	50	5	112
MLI- 205	Digital Library System	40	2Hrs	10	50	5	80
MLI- 206	Information System Analysis & Design	40	2Hrs	10	50	5	80
MLI- 207	Library Statistics and Informetrics	40	2Hrs	10	50	5	80
MLI- 208	Dissertation	40	-	Viva-Voce - 10	50	5	
	Total Marks	320		80	400	40	624

# Syllabus in details

# Semester-I

# **MLI-101: Information & Communication**

**Course Objective**:

> To provide knowledge about various sources of information, communications.

# **Course Outcome:**

After studying this paper, the students shall be able to:

- Provide knowledge about various information sources
- > Introduce students with the concept of communication including channels, barriers and models.

## **Unit 1: Knowledge and Information**

Concept, Characteristics, Trends, Impact in LIS, Taxonomy, Flow of Information (Information: Its Nature, Characteristics & Scope; Definition, Kinds, Nature and Use; Representation of Information- Signal, Sign, Symbols, Language & Scope;)

## **Unit 2: Information Science**

Concept, Information Science in Computer Science Vs Library Science,

Policies, issues (Introduction to Systems Theory; Churchman Systems Model, Debon's EATPUT Model and Component Oriented Models; Function Oriented Information Systems: MIS, DSS, Expert system)

### **Unit 3: Communication**

Types, Models, Process, tools/media, scholarly communication (Information Communication- Types of Communication - Managerial - Business – Scholarly Communication – Theories and Models of Communication Theories, Models & Media, Barriers to Communication of Information; Identification of Users Concept of Need, Want, Demand & Requirement; Users Categories : Planners, Policy Makers, Managers, R&D Personnel, People at Grass Root; Information Seeking Behaviour of Different User Groups)

#### **Unit 4: Social Impact**

Social Development, National and Global Information policies, Information system model in Society (National Information Systems: NISCAIR, DESIDOC, NASSDOC, SENDOC, NDCMC, ENVIS, etc. Global Information Systems - Programmes and Activities of UNESCO, UNISIST, IFLA, INIS, AGRIS, INSPEC and MEDLARS)

#### Suggested/Essential List of References/ Texts:

- 1. Vickery, B.C. & Vickery, A. (1987). Information Science in Theory and Practice. London: Butterworth.
- 2. Sharma, S. & Gopal, S. (2011). Applications of Knowledge management in digital era. New Delhi: GNOSIS.
- 3. Kawatra, P.S. (2000). An introduction to information systems. New Delhi: A.P.H. Publishing.
- 4. Menon, S. (2003). Protection of Intellectual property in cyber space. New Delhi: Authorspress.
- 5. Secker, J. (2010). Copyright and e-learning: A guide to Practitioners. London: Facet Publishing
- 6. Angrew, G. (2008). Digital rights management: A librarian's guide to technology and practice. U.K.: Chandos Publishing.
- 7. Parashar, R.G. (1991). Information and its communication. New Delhi: Medallion Press.
- 8. Olive, A. (2007). Conceptual modeling of information systems. Berlin: Springer-Verlag
- 9. Losse, R. M. (1990). The Science of Information. San Diego: Academic Press.
- 10. Rikowski, R. (2007). Knowledge Management: Social, cultural and theoretical perspectives. U.K.: Chandos Publishing.
- 11. Sharma, P. (2004). Knowledge Management. New Delhi: A.P.H. Publishing.

#### FM 40 CR-5 (80 Classes)

12. Khan, M.T.M. (1998). Information organization and communication. New Delhi: Ess Ess Publishing

## MLI-102: Information Consolidation Analysis and Repackaging

FM 40 CR-5 (80 Classes)

## Course objective:

> To introduce information analysis, repackaging and consolidation

# **Course Outcome:**

After studying this paper, the students shall be able to:

- > Develop acquaintance with abstracting and trends in Information analysis
- > Impart skills in Information analysis, repackaging and consolidation.

## **Unit 1: General Concept and Overview**

Abstract & Abstracting: Concept, Types, procedure of Abstracting, Guidelines in preparing Abstracts • Repackaging and consolidation: Concept and Need • Procedure of repackaging: Content analysis, formatting, consolidation Study of few internationally recognized Abstracting /Indexing Services: Sci-Finder, PUB-MED, Web of Science.

## **Unit 2: Information Seeking Behavior**

Overview of Information Behavior, Concepts in Information Behavior, Models of Information Behavior, Theories Relevant to Information Behavior, Research Methods for Studying Info Behavior, Application and Reflection

# Unit 3: Methodology

Planning & Preparation, Design, Development, Evaluation

#### **Unit 4: Product and Services**

Presentation, Illustrations, Standards and Marketing (Information Consolidation Products: Concept, Types, Design and Development; Strategies and Techniques- Strategic Planning, Marketing Research, Marketing Process, Marketing Environment: Producer, Consumer – Buyer Behavior; Marketing Information System, Marketing Mix- Kotler's Four C's – McCarthy's Four P's)

#### Suggested/Essential List of References/ Texts

- 1. Rajan, T.M. (1981). Indexing systems: Concepts, models and techniques. Calcutta: IASLIC
- 2. Chakrabortty, A.R. & Chakrabarti, B. (1984). Indexing: Principles, processes and products. Calcutta: The World Press.
- 3. Prashar, R.G. (1989). Index and Indexing systems. New Delhi: Medallion Press.
- 4. Riaz, M. (1989). Advanced indexing and abstracting practices. New Delhi: Atlantic publishers.
- 5. Chowdhury, G.G. (2010). Introduction to model information retrieval system (3rd ed.). London: Facet publishing
- 6. Rich, Elaine. (1990). Artificial intelligence (2nd ed.). New York: McGraw-Hill.
- 7. Salton, G. & McGill, M.J. (1983). Introduction to modern information retrieval. New York: McGraw-Hill.
- 8. Lancaster, F.W. (1991). Indexing and abstracting in theory and practice. London: Library Association Publishing.
- 9. Dierick, H. & Hopkinson, Alan. (1981). Reference manual for machine-readable Bibliographic Descriptions (2nd ed.). Paris: UNESCO.
- 10. Date, C.J. (1981). An introduction to database systems (3rd ed.). Reading, MA: Addison-Wesley
- 11. Aitchison, J. & Gilchrist, A. (2000). Thesaurus construction and use: a practical Manual (4th ed.). London: Aslib
- 12. Bawden, D. (2007). Information seeking and information retrieval: the core of the information curriculum. Journal of Education for Library and Information Science. 48 (2), pp.125-138.

## MLI-103: Information Processing (Theory)

#### FM 40 CR-5 (80 Classes)

#### **Course objective**:

> To introduce concepts in information processing and retrieval

#### **Course Outcome:**

After studying this paper, the students shall be able to:

- > Introduce the concept of ISR including indexing languages, vocabulary control, search strategies etc.
- > Familiarize students with Information retrieval models and develops skills in designing thesaurus

#### Unit 1: System Approach to Subject

Universe of Knowledge: Mapping and Problems, Universe of Subject, Relevance of the Study of Universe of Subject, Developmental and Structural Dimensions of the Study of Universe of Subjects: Attributes of the Universe of Subject, Kinds of Subjects, Subject as System, Theory of Integrative level

#### **Unit 2: Absolute Syntax**

Concept, Structure and Pattern, Problems in the efficient use of the Language surrogate, Framework for representation, Components of Subject, generalized facet structure for subjects, Controlled Vocabulary, Ontology, web ontology, Taxonomy, Folksonomy, Standards

### **Unit 3: Classification Scheme Design**

Need and utility of library classification schemes, Types of classification schemes, Depth classification: Methods available for construction of depth classification schemes Principles, Objectives, Manifestation,

# **Unit 4: Intellectual Organization**

Trends in classification: Automatic classification, Classification in online system and Web; Knowledge Organization for Digital Libraries, Web Dewey.

#### Suggested/Essential List of References/ Texts

- 1. Broughton, Vanda. (2004). Essential Classification. London: Facet Publishing.
- 2. Dhiman, A. K. & Yashoda Rani. (2005). Learn Library Classification. New Delhi: Ess Ess.
- 3. Husain, Sabahat. (2004). Library Classification: Facets and Analysis. Delhi: B. R. Publishing.
- 4. Jennex, Murray E. (2008). Knowledge Management: Concepts, Methodologies, Tools and Applications. New York: Information Science Reference.
- 5. Kao, Mary L. (2003). Cataloguing and Classification for Library Personnel. Mumbai: Jaico.
- 6. Kumar, P. S. G. (2003). Knowledge Organization, Information Processing and Retrieval Theory. Delhi: B. R. Publishing.
- 7. Pathak, L. P. (2000). Sociological Terminology and Classification Schemes. New Delhi: Mittal Publications.
- 8. Ranganathan, S. R. (2006). Philosophy of Library Classification. Bangalore: Ess Ess.
- 9. Singh, Sonal. (1998). Universe of Knowledge: Structure & Development. Jaipur: Raj Publishing.
- 10. Sood, S. P. (1998). Universe of Knowledge and Universe of Subjects. Jaipur: G. Star Printers. 11. Taylor, A. G. (2007). Introduction to Cataloguing and Classification (10th ed.). New Delhi: Atlantic
- 11. Jennifer, E. R. (1987). Organising knowledge: An introduction to information retrieval. Aldershot: Gower.

## MLI-104: Resource Description (Theory)

#### FM 40 CR-5 (80 Classes)

#### Course objective:

➤ To familiarize the students with the concepts of resource description.

#### **Course Outcome:**

After studying this paper, the students shall be able to:

- > Introduce various concepts, theories and principles in cataloguing.
- > Provide knowledge about various standards in document description and bibliographic exchange.

## **Unit 1: Bibliographic Organization**

Principles, Rules, Designing methodology, Code (Vocabulary control - Meaning and importance; Vocabulary Control Tools - Subject heading Lists, Thesaurus, Thesaurofacet, Classarus ;Thesaurus - its purpose, structure and format;Thesaurus construction techniques)

# **Unit 2: Subject Indexing**

Subject Indexing Language, Indexing Systems, Design, Products

(Indexing - Meaning, Purpose and Need; Principles of subject indexing; Pre coordinate indexing a post coordinate indexing; Key word indexing KWIC & KWOC; Citation indexing –Science Citation Index and Social Science Citation Index;)

#### **Unit 3: Evaluation of IR**

Meaning, Scope, Models, Evaluation Techniques/methodologies, Test

(Criteria for evaluation; Design of evaluation programmes; Steps of evaluation; Evaluation projects –Aslib-Cranfield studies, Medlars Evaluation Project; Information Retrieval Systems - Purpose, Functions and Components; Comparison with Shannon & Weaver model; Search strategy-formulation of strategy for on-line search )

## **Unit 4: Standards**

ISBD (ER), CCF, FRBR, DCMS, GILS, TEI, OCLC Manual, MARC, ISO2709

# MLI-105: Information & Communication Technology (Theory)

FM 40 CR-5 (80 Classes)

#### **Course objective**:

> To provide knowledge about information, communication and information technology

#### **Course Outcome:**

After studying this paper, the students shall be able to:

- > Introduce students with the concept of information and communication including channels, barriers and models.
- provide knowledge about various aspect of advance level information technology applicable in Library and Information Science

#### **Unit 1: Information Technologies**

Meaning, Scope, System, Services, Tools, Techniques, Impact in LIS; Retrieval features of selected text retrieval engines – Apache-Solr, Lucene, MGPP and Zebra;

# Unit 2: DBMS

Architecture, Models, E-R Model, Normalization, **Unit 3: Web Application** 

Web database, Evaluation, Content Design, Content Management,

#### Unit 4: Open Knowledge System

Scholarly communication and Open knowledge movement (history and landmarks); Open Access (OA) resources – nature, features, need and advantages (including citation advantages through article-level metrics); DOAJ and Green path / Gold path of OA – Open DOAR, ROAR; Open Data; OA rights (author addenda) and licensing (Creative Commons and others); OA policy tools – SHERPA/RoMEO, SHERPA/JULIET, Open DOAR. OA interoperability standards – Z 39.50, SRU/SRW, OAI/PMH, ORE and others;

#### Suggested/Essential List of References/ Texts

- 1. Bhatnagar, S. Information and communication technology in development: cases from India. New Delhi: Sage. 2002
- 2. Chopra, Rajiv. Database Management System (DBMS): A Practical Approach, 5th Edition. New Delhi: S CHAND & Company Limited, 2016.
- 3. Gupta, G.K. Database Management System. New Delhi: Tata McGrow-Hill. 2011
- 4. Gupta, Satindar Bal, Mittal, Aditya. Introduction to Database Management. Bangalore:University Science Press. 2009
- 5. Risse, Thomas, et al. Digital Libraries for Open Knowledge: 24th International Conference on Theory and Practice of Digital Libraries, TPDL 2020, Lyon, France, August 25-27, 2020, Proceedings. Germany: Springer, 2020.
- 6. Ontology in Information Science. Thomas Ciza (ed). Croatia: IntechOpen, 2018.
- 7. Barker, Deane. Web Content Management: Systems, Features, and Best Practices. N.p., O'Reilly Media, 2016.
- 8. Eito-Brun, Ricardo. XML-based Content Management: Integration, Methodologies and Tools. United Kingdom:Elsevier Science, 2017.
- 9. Boiko, Bob. Content Management Bible. Germany: Wiley, 2005.
- 10. Suber, Peter. Open Access. United Kingdom: MIT Press, 2012.
- 11. Bawden, David., Wakeling, Simon., Robinson, Lyn., Pinfield, Stephen. Open Access in Theory and Practice: The Theory-practice Relationship and Openness. United Kingdom: Routledge, Taylor & Francis Group, 2020.
- Information and Communication Technology: Second IFIP TC 5/8 International Conference, ICT-EurAsia 2014, Bali, Indonesia, April 14-17, 2014, Proceedings. A Min Tjoa, Erich J. Neuhold, Ilsun You, Linawati, Made Sudiana Mahendra (ed). Germany: Springer Berlin Heidelberg.2014
- 13. Qin, Yongrui., Yao, Lina., Benatallah, Boualem. Managing the Web of Things: Linking the Real World to the Web. Netherlands: Elsevier Science, 2017.
- 14. Sinha, Priti., Sinha, Pradeep K.. Information Technology: Theory and Practice. India: PHI Learning, 2016.

# MLI-106: Management of Information System & Organization

FM 40 CR-5 (80 Classes)

#### Course objective:

> To prepare students to carry out library housekeeping operations.

# **Course Outcome:**

After studying this paper, the students shall be able to:

- > Train students in selecting and acquiring of documents.
- > Teach the practices of accessioning, circulation and maintenance of documents.

#### **Unit 1: Planning and Management**

Methodology, Factors, Assessment, MBO, Systems Study: Concept, Components analysis, evaluation and design. Library as a System, Subsystems of a Library, Performance evaluation of Library and Information Centres, System Analysis, PERT/CPM, Work studies, Flow chart and Gantt charts, SWOT Analysis: Concept and use, Management Information System (MIS): Concept and Use

# **Unit 2: Organization Management**

Needs, features, elements, Organizational Structure, Staff Manual, Library Surveys, Statistics and Standards, Ideology, Structure, Design, Standards

# **Unit 3: Financial Management**

Resource mobilization, Budgeting methods - PPBS and ZBB, Cost effectiveness and cost benefit analysis Outsourcing

#### **Unit 4: Human Resource Management**

Objectives of human resource management, Manpower Planning, Categories of staff, Staffing requirements; Method of manpower planning – Job analysis, Job description, Selection, Recruitment, Induction and deployment, Training and Development; Leadership – theories, styles, approaches and models; Motivation – theories of motivation, sources of motivation.

# Suggested/Essential List of References/ Texts

- 1. Beardwell, Ian and Holden, Len (1996). Human Resource Management: A contemporary perspectives. London: Longman.
- 2. Bryson Jo. (1996). Effective Library and Information Management. Bombay: Jaico Pub. House
- 3. Chabhra, T N et. al. (2000). Management and Organisation. New Delhi: Vikas.
- 4. Drucker Peter F. (2002). Management Challenges for the 21st century. Oxford; Butterworth Heineman.
- 5. Evans, G. Edward and Layzell, Patricia. (2007). Management Basics for Information Professionals, Second Edition. Londn: Libraries Unlimited.
- 6. Johnson, Peggy. (2009). Fundamentals of Collection Development and Management, 2nd ed. ALA
- 7. Kotler, Philip (2003). Marketing Management. 11th ed. New Delhi: Pearson.
- 8. Mittal (R L). Library administration: theory and practice. 2007. Ess Ess, New Delhi.
- 9. Narayana, G J. (1991). Library and Information management. New Delhi: Prentice Hall of India.
- 10. Paton, Robert A. (2000). Change Management. New York: Response Books.
- 11. Ranganathan (S R). Library administration. 2006. Ess Ess, New Delhi.
- 12. Rowley, Jennifer (2001). Information Marketing. Aldershot: Ashgate Publishing Limited.
- 13. Smith, Judith Read, Mary Lea Ginn and Kallaus Norman, F. (2010). Records Management. 7th ed. Southwestern, Division of Thomson Learning.
- 14. Stoner, James A F (et.al). (1996). Management: Global Perspectives. 10th ed. New York: MC Graw Hill Inc.
- 15. Stueart, Robert D and Moran (Barbara B. Moran). (2007). Library and Information Centre Management. 7th ed. London: Libraries Unlimite

# MLI-107: Research Methodology

# FM 40 CR-5 (80 Classes)

# **Course objective**:

To develop research skills in students and enable them to carry out their own research as well as helps others to research as professional librarian.

# **Course Outcome:**

After studying this paper, the students shall be able to:

- Give an advanced exposure to the students about the research
- > Develop acquaintance with intensive techniques and skills of research process.
- Familiarize the art and style of writing a research report

# Unit 1: Research and its categories

Meaning, Characteristics, Importance, Types, Methods (Research: Concept, Meaning and Significance; Types of Research: Qualitative and Quantitative Research; Inter-disciplinary and Multi-disciplinary research; Problem identification; Research design: formulation of hypothesis, Literature Search)

# Unit 2: Research Design

Techniques and methodologies, Analysis and Interpretation (Methods: Historical Research, Survey Research and Experimental Research; Case Study, Observation Method, Scientific Method, Delphi Method; Sampling Techniques ;)

#### **Unit 3: Data Representation**

Sample, Population, Questionnaire, Schedule, Sampling, Observation, On-line Survey, Presentation Methodology (Data Collection tools: Questionnaire, Interview, Schedule, Observation, Scales and Check Lists, Historical / recorded,; Graphical presentation of data,; Measurement of Central Tendency, Mean, Mode, Median, Measurement of Variables; Measures of Dispersion, Correlation Studies and Regression Analysis; Chi Square test and Sociometry)

#### **Unit 4: Research Structure**

Research Report Writing, Structure, Documentation, Standards (Research Report: Structure, Style, Characteristics, and Contents; Guidelines for Citation / References: Standards, rules, manuals; E-Citation and methods of Research Evaluation; Modern trends of Research – LIS and other disciplines )

#### Suggested/Essential List of References/ Texts

- 1. Booth, W. C., Williams, J. M. and Colomb, G. G. (2003). The Craft of Research. University of Chicago Press.
- 2. Brady, John. (1997). The Craft of Interviewing. New York: Vintage.
- 3. Gillham, Bill. (2000). The Research Interview. London: Continuum Press.
- 4. Kish, Leslie. (1995). Survey Sampling. New York: Wiley.
- 5. Kumar, Krishan. Research methods in library and information science. Rev. Ed. 1999. Har-Anand Publications, New Delhi
- 6. Lancaster (F W) and Powell (R R). Basic research methods for librarians. 1985. Ablex publishing, New Jersey.
- 7. Marshall, Catherine and Rossman, Gretchen B (2006). Designing Qualitative Research. Sage USA.
- 8. Nielsen, Jakob. (2000). Designing Web Usability. New Riders, USA.
- 9. Payne, Stanley. (1951). The Art of Asking Questions. Princeton University Press.
- 10. Raju, Nemani Govinda. (2009). Bibliometric Applications: Study Of Literature Use Patterns
- 11. Rea , Louis M and Parker , Richard A. (2005). Designing and Conducting Survey Research, San Francisco: Jossey-Bass.
- 12. Reinard , John C. (2006). Communication Research Statistics. Sage, USA.
- 13. Rowntree, Derek. (2003). Statistics without Tears: A Primer for Non-Mathematicians. London: Penguin.
- 14. Rubin, Herbert and Irene (2004). Qualitative Interviewing: The Art of Hearing Data. Sage, USA.
- 15. Singh (S P). Research methods in social sciences: a manual for designing questionnaires. 2002. Kanishka, New Delhi.
- 16. Sudman, Seymour (1976). Applied Sampling. New York: Academic Press.
- 17. Wadsworth, Yoland . (1998). Every day Evaluation on the Run: A collection of simple methods for evaluating the success of any project. Australia: Allen and Unwin.
- 18. Williams, Frederick and Monge, Peter. (2001). Reasoning with Statistics. Harcourt, USA.
- 19. Willis, Gordon B. (2004). Cognitive Interviewing: A Tool for Improving Questionnaire Design. Sage U

#### MLI-108: Information & Communication Technology (Practical)

Aim: The purpose of this paper is to provide knowledge about the information technology and its applicability in library & Information centers

Objectives:

- 1. To introduce students computer and its components
- 2. To familiarize the students with various operating systems and Internet Searching

# Unit 1: Design and Handling Database (MySql/ MSSQL Server/) ASP/JSP/ PHP

- Unit 2: Handling LMS (SOUL/ KOHA)
- Unit 3: Content Management (DHTML/ XML-CSS/Open Source Software)
- Unit 4: Database Evaluation, Search query

#### Semester-II

FM 40 CR 5 (112 Classes)

### MLI-201: Information Economics & Knowledge Management

#### FM 40 CR-5 (80 Classes)

#### **Course objective**:

To provide a general understanding of system analysis and quality assessment of library and information systems centres etc.

#### **Course Outcome:**

After studying this paper, the students shall be able to:

- > Provide the students an idea of various aspects of systems analysis
- Make understandable how to measure and maintain quality control of library and information systems and centres

#### **Unit 1: Information as Resource**

Information: Definitions and Concepts, Information as resource and commodity, Nature, Information: Type, Information: Properties, Barriers to Information, Information Studies: Scope, Ranganathan's Five Laws and Information Studies Observations of B.C. Vickery on Information Science

#### **Unit 2: Marketing**

Information Marketing: Marketing of information product and services, Planning, process and strategies, Economic analysis models, cost-benefit analysis and cost effectiveness, Market research,

## Unit 3: Knowledge management

Knowledge Management: Concept and definitions – Need for Knowledge Management in the emerging and changing business environment – Understanding knowledge; Types of knowledge - explicit and tacit knowledge – Knowledge works changing role of Library and Information professionals. Tools for knowledge Management

#### **Unit 4: Knowledge Society**

Information Society Concept, Social Transformation, Features of Emerging Knowledge Society, Accelerated growth of Knowledge, Knowledge Economy, Globalization of Trade and Commerce Polity, Power Structure and Shift, Policy Issues

Indian Society, Digital Divide: The Indian Scenario, Indian Planning and Targets to be achieved

## Suggested/Essential List of References/ Texts

- 1. Belkin, N. J. (1978). Information Concepts for Information Science. Journal of Documentation. 34, 55-85.
- Bell, Daniel (1974). The Information Society: The Social Framework of the Information Society. In Dertouzos, M. L. and Moses (eds). The Computer Age: A Twenty Years View. Cambridge, Mass: MIT Press.
- 3. Brookes, B. C. (1980). The Foundations of Information Science. 4 parts. Journal of Information Science. 2 (3).
- 4. Cronin, B. (1981). Marketing of Library and Information Services. London: ASLIB. 2. Eileen, E. D.S. (2002). Marketing concepts for Libraries and Information Services. 2nd Ed. London: Facet Publishing.
- 5. Bal-I Bahra. Nicholas (2001). Competitive Knowledge Management. New York: Palgrave. Bar, Bartlett et. al. (2000). Managing knowledge and learning: Case Study. Boston: Harvard Business School Press. Barquin, Ramon
- 6. C. (2001). Knowledge Management: The Catalyst for Electronic Government. Vienna: Management Concepts. Baumard, Philippe (2001). Tacit Knowledge in Organisations. London: Sage Publications.
- 7. Lamberton, D M (1984). The Economics of Information.
- 8. Liebowitz, Ja (2001). Knowledge management, learning from knowledge engineering. London: CRC Press.
- 9. Luther, Machiavelli and Salmon (1999). Beyond the information revolution.
- 10. Machlup, Fritz (1983). The Economics of Information and Human Capital. Princeton: Princeton University Press.
- 11. Neelameghan, A (1999). Information economy and knowledge society: an introduction, Information Science 4 parts.
- 12. Preston, Paschal (2001).Reshaping communications. Technology, Information and Social change. New Delhi: Sage Publications.

# MLI-202: Content Creation & Technical Writing

FM 40 CR-5 (80 Classes)

## **Course objective**:

▶ To impart knowledge and skill of technical writing and content design.

## **Course Outcome:**

After studying this paper, the students shall be able to:

- Make them aware various guide lines of writing of technical documents;
- > prepare skill of writing content in digital environment

## **Unit 1: Guideline**

Structure, Presentation, Condensation, abstracting, digesting,

(Communication Process- Overview, Target Groups in Written Communication, Reader-Writer Relationship; Content-Strategy, curation- Find relevant information to share, Creation-email, enewsletter, blogpost, PowerPoint presentation, social media post, technical articles, Whitepaper, webinars, podcast etc., Repurposing - analyze your existing content to repackage intoeBooks, Infographics, Technical Bulletins, etc.)

# **Unit 2: Technical Writing**

Meaning, Objective, mechanism, style, tools (Structure: Definition, Purpose, Characteristics and Functions; Characteristic Features of Technical Writing; Case Studies: Preparation of Short Communication, Review Articles, Technical Reports, Monographs, Dissertations and House Bulletins etc.)

#### **Unit 3: Technical Editing & Standards**

Guidelines, proof reading, Standards, Manuals (Editor, Editorial Process, Editorial Tools,) Standards and Manuals-(Style manual-Chicago Manual APA, and MLA Style manuals; Copy editing and proof reading)

# **Unit 4: Software Documentation and Content Creation**

E-content creation. Writing of help menu of any product/service/software

# MLI-203: Information Processing (Practical)

#### **Course objective**:

> To impart practical knowledge about knowledge organization.

# **Course Outcome:**

After studying this paper, the students shall be able to:

- Introduce various applications of theories in classification.
- > Provide hands on practice knowledge about standard schemes of classification for knowledge organization and document classification

Unit 1: Knowledge Organization of Micro Documents using (UDC/CC/LC/DDC) 20 Unit 2: Designing Depth Classification Schedule 20

#### Suggested/Essential List of References/ Texts

FM 40 CR-5 (112 Classes)

- 1. Fosket, A. C. (1973). Universal Decimal Classification. Clive Bingley, London.
- 2. Mcllwaine, I. C. (2007). The Universal Decimal Classification: A guide to its use. UDC Consortium, The Hague, Netherlands.
- 3. Universal decimal classification. (Latest Edition). British Standards Institution, London
- 4. Ranganathan, S.R. (1960). Colon Classification. Bombay: Asia Publishing.
- 5. Sehgal, R.L. (1994). Classification: Theory and Practice. New Delhi: Ess Ess Publication.
- 6. Satija, M.P. (2011). A Guide to the Theory and Practice of Colon Classification. New Delhi: Ess Ess Publication.
- 7. Satija, M.P. (1995). Manual of Practical Classification. New Delhi: Sterling Publisher.
- 8. Raju, A.A.N. (2001). Colon Classification Theory and Practice: a Self Institutional Manual. New Delhi: Ess Ess Publication.
- 9. Satija, M.P. (1989). Colon Classification: a Practical Introduction. New Delhi: Ess Ess Publication

## MLI-204: Resource Description (Practical)

## Course objective:

> To provide practice in document cataloguing.

# **Course Outcome:**

After studying this paper, the students shall be able to:

- Impart skills in using DDC/Sears List/LC in classifying various documents
- > Impart skills in cataloguing documents using AACR II and CCC

Unit 1: Cataloguing of NBM and E-Resource Unit 2: Designing Controlled Vocabulary/ Thesaurus/ Indexing of micro documents

# MLI-205: Digital Library System

**Course objective**:

> To provide knowledge about the computer applications and its applicability in library and information centers

# **Course Outcome:**

After studying this paper, the students shall be able to:

- > Introduce concepts of automation and their applications in libraries;
- > Familiarize students with library management and digital library software and their evaluation
- > Develop skills to plan and implement library automation and digitization

#### Unit 1: Genesis

Definition, Objectives, Scope, Electronic-Virtual Library (Digitization: meaning, needs and purposes; Digitization process: steps and tools; File formats: types and conversion; Capture devices, image editing software, OCR and UNICODE); Socio-legal aspects of digital information resources (copyright, DRM, other IPR issues, licensing issues); Web 2.0, Linked Data, Semantic Web- what, why, nature and features; components, tools and technologies;  $\Box$ RDF,  $\Box$ Ontology as Semantic Web tool, Use of SKOS in knowledge organization;  $\Box$ Library 2.0 – application of Web 2.0 tools in library services

# **Unit 2: Architecture**

Design, Models, DL Initiatives (Definition, objectives, purpose & scope; Open Access Initiatives (OAI), Digital library initiatives in India; Institutional Repositories Vs Digital Library; Digital Preservation: needs, migration and replication ;);

# Unit 3: Metadata & Metadata Harvesting

Meaning, Types, Functions, Schemes, Inter-operability and Cross Walk. RDF, OA interoperability standards – Z 39.50, SRU/SRW, OAI/PMH, ORE and others; Digital Rights Management (DRM)) Encoding standards (W3C and IETF standards) and Resource Description Framework (RDF); Resource identifiers (Naming services) – URN, URI, CNRI's handle, PURL, DOI;

# **Unit 4: Open Source Digital Repository**

# FM 40 CR-5 (80 Classes)

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FM 40 CR-5 (112 Classes)

DSpace/GreenStone/ EPrint (Digital Library Management Software (DLMS): Selection process and features (Greenstone, D-space and E-prints)

#### Suggested/Essential List of References/ Texts

- 1. Akerkar, R. . Foundations of the Semantic Web: XML, RDF and ontology. Oxford, U.K: Alpha Science International.2009
- 2. Arthur, M. H. . *Expanding a digital content management system: For the growing digital media enterprise*. Amsterdam: Elsevier Focal Press. 2006
- 3. Casey, M. E., & Savastinuk, L. C. *Library 2.0: A guide to participatory library service*. Medford, N.J: Information Today.2007
- 4. Chamis, A. Y. Vocabulary control and search strategies in online searching. New York: Greenwood Press. 1991
- 5. Chin, A. G. Text databases and document management: Theory and practice. Hershey, Pa: Idea Group Pub.2001
- 6. Courtney, N. Library 2.0 and beyond: Innovative technologies and tomorrow's user. Westport, Conn: Libraries Unlimited. 2007
- 7. Chowdhury, G.G. & Chowdhury, S. Introduction to digital libraries. London: Facet Publishing.2003
- 8. Chowdhury, G.G. & Foo, Schubert, Ed. . *Digital libraries and information access: research perspectives.* London: Facet Publishing. 2012
- 9. Goker, A., & Davies, J. Information retrieval: Searching in the 21st century. Chichester, U.K: Wiley.2009
- 10. Hjelm, J. Creating the semantic Web with RDF: Professional developer's guide. New York: Wiley. 2001
- 11. Jones, K. M. L., & Farrington, P.-A. Using WordPress as a library content management system. Chicago, IL: ALA TechSource. 2011
- 12. Lesk, M. Practical digital libraries: books, bytes and bucks. San Francisco: Morgan Kaufmann. 1997
- 13. Lesk, M. Understanding digital libraries. 2nd ed. San Francisco: Morgan Kaufman. 2004
- 14. Marchionini, G. Information seeking in electronic environments. Cambridge: Cambridge University Press. 1995
- 15. Meadow, C.T, Boyce, B.R., & Kraft, D.H. Text information retrieval systems(2nd ed.). San Diego: Academic Press. 2000
- 16. Meadow, C. T., Boyce, B. R., & Kraft, D. H. Text information retrieval systems. 2nd ed. San Diego: Academic Press.2000
- 17. Méndez Rodríguez, Eva María, & Greenberg, Jane. Linked data for open vocabularies and HIVE's global framework. EPI SCP. 2012
- 18. Ndubisi, N. O. Content management systems. Bradford, England: Emerald Group Pub. 2006
- 19. Vossen, G., & Hagemann, S. Unleashing Web 2.0: From concepts to creativity. Amsterdam: Elsevier/Morgan Kaufmann. 2007
- 20. White, M. S. The content management handbook. Abingdon: Facet Pub. 2005
- 21. Wong, W, Liu, W, Bennamoun, M, Wei Wang, Payam Barnaghi, & Andrzej Bargiela, *Learning SKOS relations for terminological ontologies from text*. IGI Global. 2011

#### MLI-206: Information System Analysis & Design

#### Course objective:

> To introduce information analysis, repackaging and consolidation

#### **Course Outcome:**

After studying this paper, the students shall be able to:

- > Develop acquaintance with abstracting and trends in Information analysis
- > Impart skills in Information analysis, repackaging and consolidation.

#### Unit 1: Library as System

Monitoring and controlling techniques –MIS, SWOT, DFD, Network Analysis, PEP, MAP, PCS (System analysis and design)

#### **Unit 2: Designing of networks**

Planning, Scope, Benefit, Cost Analysis, Library Consortia, Network Analysis (PERT/CPM)

# FM 40 CR-1 (80 Classes)

Quality Indicator in LIS domain - LibQUAL+. COUNTER, EQUINOX, ISO-9000,

#### **Topic 3: Total Quality Management (TQM)**

Concept, Elements, Application, Standard, Certifying Authority (Quality management: Quality concept, element and application to libraries and information centres; Total Quality Management: Definition, scope and purpose and application to Libraries and information centres; TQM Tools and Techniques; Quality Standards), Change management in library and information centres

## **Unit 4: Ergonomics**

Concept, Impact of Ergonomics in Library.

## Suggested/Essential List of References/ Texts

- 1. Bakewell, K. G. B. (1997). Managing user-centred libraries and information services. (2nd ed.). London:
- 2. Maxwell. Cook, C. (2002). The maturation of assessment in academic libraries: The role of LibQUAL+ TM.
- 3. Bradford, England: Emerald Group Pub. Coote, H. & Batchelor, B. (1997). How to market your library services effectively. (2nd ed.). London: Aslib.
- 4. Crawford, J. (1997). Evaluation of library and information services effectively (2nd ed.). London: Aslib.
- 5. Edward, E. G. (1983). Management techniques for librarians. 2nd ed. New York: Academic Press, 1983 (2nd ed.). New York: Academic Press.
- 6. Evans, G. E. (1983). Management techniques for librarians. (2nd ed.). New York: Academic Press.
- 7. Georgi, C., Bellanti, R., & Holbrook, F. K. (2013). Excellence in Library Management. Hoboken: Taylor and Francis.
- 8. Goutam, J. N. (1991). Library and information management. New Delhi:, 1991. New Delhi: Prentice-Hall India. Hayes,
- 9. R. M. (2001). Models for library management, decision-making, and planning. San Diego, Calif: Academic Press.
- 10. Heath, F. M., Kyrillidou, M., & Askew, C. A. (2004). Libraries act on their LibQUAL+ findings: From data to action. Binghamton, NY: Haworth Information Press.
- 11. Hernon, P., & Altman, E. (1998). Assessing service quality: Satisfying the expectations of library customers. Chicago: American Library Association.
- 12. Jain, A. K. (1999). Marketing information products and services: a primer for library and information professionals. New Delhi: Tata McGraw-Hill.
- 13. Katz, W.A. (1980). Collection development, the selection of materials for libraries. New York: Holt, Rinehart & Winston. Krishan Kumar. (1985). Library manual. New Delhi: Vikas.

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CR-5 (80 Classes)

# MLI-207: Library Statistics and Informetrics

#### Course objective:

> To develop research skills through data analysis using various statistical applications in students

#### **Course Outcome:**

After studying this paper, the students shall be able to:

- ➢ Give an advanced knowledge of handling bibliographic data
- > Understand and gain knowledge of various statistical applications for bibliographic data analysis
- > Familiarize the use of various statistical software and packages

# **Unit 1: Statistical Method**

Data Collection – Introduction; Data Collection Tools and Techniques – Questionnaire; Schedule; Interview; Observation; Scales and check and list; Library records, Reports;

Data Analysis and Interpretation – Introduction (Data – meaning and types; Statistics – meaning and types [Descriptive and Inferential]);

Data presentation – Generalization, Tabulation, Graphical presentation and Use of statistical packages; Research reporting – Structure, styles, contents, guidelines, quality parameters and citation standards.

## Unit 2: Operation Research

Techniques, Monte Carlo technique

Introduction, Historical Background, Scope of Operations Research, Features Types of Models, Operations Research Methodology, Techniques and Tools, Limitations of Operations Research

## **Unit 3: Bibliometric Distribution**

Libramety, Bibliometrics, Scientometrics, Zipf's law, Bradford's laws, Brooke's law, Lotkas Law, Bibliometrics and Informetrics Laws and Indicators; Growth, Obsolescence (Synchronous vs. Diachronous studies), Citation and Co-Citation analysis, Network analysis, half-life, collaboration, Coupling,

## Unit 4: Informatrics with statistical packages

Informetrics – Meaning, Scope and features Informetrics Modeling.;

Bibliometrics and Informetrics tools – SCI, SSCI, A&HCI, MSCI, SCOPUS, Google Scholar, PoP etc; Webometrics and Altmetrics Tools., Science indicators: Impact factor, h-index, g-index,i-10;Mapping of Science Research communications and Trends of LIS research,

#### Suggested/Essential List of References/ Texts

- 1. Baker, S L. and Lancaster, S.W. (1991). Measurement and evaluation of library services. 2 Ed. Arlington: Information Resources Press,.
- 2. Carpenter, R.L. and Vasu, E.S. (1979). Statistical methods for librarian. Chicago: ALA.
- 3. Donohue, J C. (1990). Understanding scientific literature: A Bibliometric approach. London: MIT.
- 4. Egghe, L., and Rousseau, R. (1990). Introduction to Informetrics: Quantitative methods in Library, Documentation and Information Science. Amsterdam: Elsevier.
- 5. Egghe, L. and Rousseau, R. (2001). Elementary statistics for effective Library and Information services management. London: ASLIB.
- 6. Garfield, E. (1979). Citation Indexing: Its theory and application in Science and Technology and Humanities. New York: John Wiley.
- 7. Meadows, A.J. (1974). Communication in Science. London: Butterworths.
- 8. Nicholas D. and Ritchil, M. (1979). Literature and Bibliometrics. London: Clive Bingley.
- 9. Rao, I. K.R. (1985). Quantitative Methods for Libreary and Information Science. New Delhi: Wiley Eastern.
- 10. Thelwall, M. (2009). Introduction to Webometrics: Quantitative web research for the Social Sciences . San Rafael, Calif: Morgan Publisher.

# MLI-208: Dissertation on Specific Areas

#### **Course objective**:

➤ To study the subject of and state of the art of specific areas.

## **Course Outcome:**

After studying this paper, the students shall be able to:

- > specific areas of contemporary Library and Information Science field, or
- > applications of any tools and techniques of Library and Information Science, or
- > growth and trends of Library and Information Science, or
- design and development of specific product, service or system

# FM 40 CR-5

